

Title: Framework for distributed monitoring of services

Author: Lenka Skotáková

Department: Department of Software Engineering

Supervisor: Mgr. Martin Děcký, Department of Distributed and Dependable Systems

Supervisor's e-mail address: martin.decky@d3s.mff.cuni.cz

Abstract: Monitoring of servers and its services enables early detection of problems. Distributed monitoring provides the advantage of load balancing between multiple nodes. Most of the tools providing distributed monitoring still retain the master node as a single point of failure. Distributed system working without a central node is more reliable. Redundancy of monitoring can be also introduced for further increase of reliability. Then it is appropriate to ensure that reports of failures do not repeat. This thesis presents a distributed system for monitoring of services, resistant to failure of nodes including a node that currently acts as a coordinator. Nodes automatically distribute tasks among themselves and found problems are collected and stored so that the notifications are not repeated.

Keywords: distributed systems, distributed monitoring, network services, Invitation algorithm